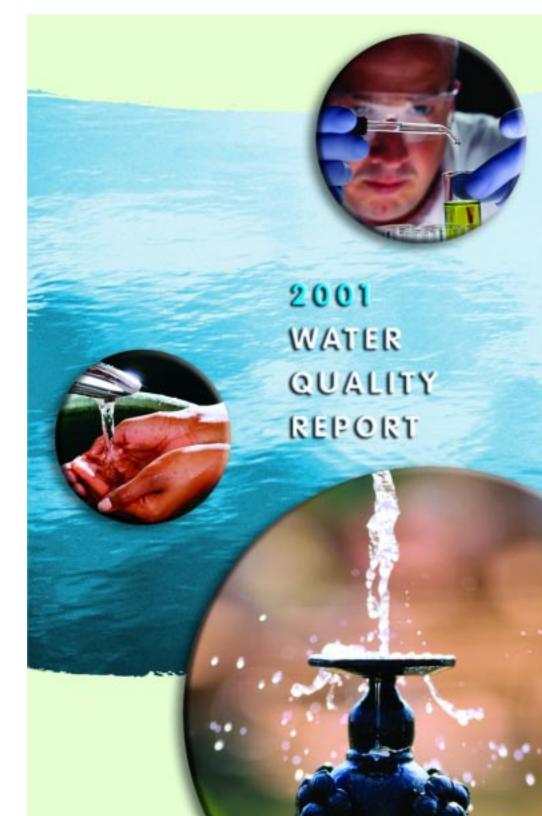


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#### **Our Mark of Excellence**

nce again we are proud to present to you our annual water quality report. Over the years, we have dedicated ourselves to producing drinking water that meets or does better than all state and federal drinking water standards. We accomplish this by continually striving to adopt new and better methods of delivering the best quality drinking water that we can. As regulations and drinking water standards change, it is our commitment to you to quickly incorporate these changes system-wide in an expeditious and cost-effective manner.

As new challenges to drinking water safety emerge, we will be vigilant in maintaining our objective of providing quality drinking water at an affordable price. If you have any health concerns relating to the information in this report, we encourage you to contact your health care provider.

#### What's Inside?

This report outlines the processes involved in delivering to you the highest quality drinking water available. In it, we will answer these important questions:

- Where does my water come from?
- What is in my drinking water?

We will also provide information on other available resources that will answer questions about water quality and health effects.



## **Got Questions?**

Call the U.S. EPA's Safe **Drinking Water Hotline** at 1-800-426-4791

## **Substances Expected in Drinking Water**

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

of infection by Cryptosporidium and other microbial contaminants are available

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## **Special Health Information**

ome people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants,

from the Safe Drinking Water Hotline (800-426-4791).

people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk

# **CITY OF MARIETTA 2001 WATER QUALITY REPORT**

## What's In My Water?

PWS ID#: GA0670005

Te are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. For your information, we have compiled a list in the table below showing what substances were detected in our drinking water during 2001. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by the U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The Georgia Environmental Protection Division has determined that the concentration of certain water-quality monitoring parameters does not change frequently within our system; therefore some of the data presented in this report are greater than one year old. For more information about this report, or for any questions relating to your drinking water, please call Tim Marshall, Environmental Compliance Coordinator, at 770-794-5229.

REGULATED SUBSTANCES								
SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Fluoride (ppm) <sup>1</sup>	2001	4	4	1.1	0.82-1.1	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Nitrate (ppm)	2001	10	10	0.96	<0.2-0.96	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
THAA's [Total Haloacetic Acids] (ppb)	2001	60	0	55.9	19.5-98	No	By-products of drinking water disinfection	
TOC [Total Organic Carbon] (ppm)	2001	NA	NA	3.2	1.2-3.2	No	Naturally present in the environment; Decay of organic matter in the water withdrawn from water sources such as lakes and streams	
TTHMs [Total Trihalomethanes] (ppb)	2001	80	0	54.8	13-105	No	By-products of drinking water disinfection	
Total Coliforms (% positive samples)	2001	<5% positive monthly samples	0	2.6	NA	No	Naturally present in the environment	
Turbidity (NTU) <sup>2</sup>	2001	TT	0	0.18	NA	No	Soil runoff	

Tap water samples were collected for lead and copper analyses from 50 homes in the service area								
SUBSTANCE (UNITS)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90% tile)	HOMES ABOVE AL	VIOLATIONS	TYPICAL SOURCE	
Copper (ppm)	2001	1.3	0	0.05	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
Lead (ppb)	2001	15	0	10	3	No	Corrosion of household plumbing systems; Erosion of natural deposits	

### Information Collection Rule (ICR)

The Cobb County-Marietta Water Authority participated in a drinking water testing program called the Information Collection Rule

#### **TABLE DEFINITIONS**

**AL** (**Action Level**): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA: Not applicable ND: Not detected

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

**ppb** (parts per billion): One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT** (**Treatment Technique**): A required process intended to reduce the level of a contaminant in drinking water.

(ICR). Most of the chemicals reported in this section are currently unregulated. The purpose of the ICR testing program is to assist the U.S. EPA in determining the occurrence of these unregulated contaminants and whether future regulation is needed. The ICR table indicates results of contaminants detected during the program, which was conducted in 1998.

INFORMATION COLLECTION RULE (ICR)									
SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE		
Chloral hydrate (ppb)	1998	NS	NS	7.0	1.9-7	No	By-product of drinking water disinfection		
Chlorate (ppb)	1998	NS	NS	124	22-124	No	By-product of drinking water disinfection		
Chlorine dioxide (ppm)	1998	NS	NS	1.5	0.1-1.5	No	Drinking water disinfectant; Oxidant for contaminants		
Chlorite (ppb)	1998	NS	NS	136	20-136	No	By-product of drinking water disinfection		
Chloropicrin (ppb)	1998	NS	NS	1.9	ND-1.9	No	By-product of drinking water disinfection		
Free Chlorine (ppm)	1998	MRDL =4ppm	NS	2.0	1.6-2	No	Drinking water disinfectant		
Total Aldehydes (ppb)	1998	NS	NS	5.0	3.7-5	No	By-products of drinking water disinfection		
Total Haloacetilenitriles (ppb)	1998	NS	NS	4.4	ND-4.4	No	By-products of drinking water disinfection		
Total Organic Halide [TOX] (ppb)	1998	NS	NS	254	94-254	No	By-product of drinking water disinfection		

<sup>&</sup>lt;sup>1</sup>Fluoride is added to the drinking water to help prevent dental cavities.

## Where Does My Water Come From?

arietta Water purchases water from the Cobb County-Marietta Water Authority (CCMWA). The CCMWA treatment facilities are supplied from two separate surface water sources. The Wyckoff Treatment Facility obtains water from Lake Allatoona. The Quarles Treatment Facility is supplied from the Chattahoochee River. Once the surface water is treated, it is transferred from the treatment facilities to the Marietta distribution system and then to you.

## **Community Participation**

arietta Water operates under the supervision of the Board of Lights and Water. This Board consists of seven representatives who establish policy for Marietta Water. You can make an appointment to voice comments or concerns to the Board on water related issues by calling the Board Manager at (770) 794-5109. The Board meets the first Monday after the first Wednesday of each month. Marietta Water maintains regular operating hours of Monday - Friday, 8:00 am - 4:00 pm. To reach the service and maintenance department, please call (770) 794-5230.

During the past year the Cobb County-Marietta Water Authority and the Atlanta Regional Commission have completed a source water assessment itemizing potential sources of water pollution to our surface drinking water supplies. This information can help you understand the potential for contamination of your drinking water supplies and can be used to prioritize the need for protecting drinking water sources. A Source Water Assessment is a study and report which provides the following information: identifies the area of land that contributes the raw water used for drinking water; identifies potential sources of contamination to drinking water supplies; and provides an understanding of the drinking water supply's susceptibility to contamination. For more information on this project visit the Source Water Assessment website at http://www.atlantaregional.com/swap/ or you can request information by mail from

the ARC: Attn: Matthew Harper, Environmental Planning Division, Atlanta Regional Commission, 40 Courtland Street, NE, Atlanta, GA 30303.

Marietta Water was awarded 2001 Distribution System of the Year by the Georgia Water and Pollution Control Association (GW&PCA). Marietta won the award for systems in the category of 10,000 - 50,000 customers. This merit was based on facilities management and operation, resources (personnel, equipment, technology), safety programs, and emergency response programs.

# **Cryptosporidium** in Drinking Water

→he Cobb County-Marietta Water Authority participated in a major drinking water quality-testing program called the Supplemental Information Collection Rule (SICR). Two of the contaminants tested for under this rule are the parasites Cryptosporidium and Giardia, which have caused outbreaks of intestinal disease in the United States and abroad. These parasites are common in surface water, very difficult to kill and even a well-run water system may contain some live oocysts (in the case of Cryptosporidium) or cysts (in the case of Giardia). The U.S. Environmental Protection Agency (U.S. EPA) is working to resolve several scientific issues that will allow it to set Cryptosporidium and Giardia safety standards. Our 1999 testing performed at the raw (untreated) water intake on the Chattahoochee River, located immediately north of the Johnson Ferry Road crossing, revealed the presence of Cryptosporidium and/or Giardia in several months' samples. These organisms were detected in the water prior to treatment. During this same period, the water at Lake Allatoona was also tested. No oocysts or cysts were detected. The Water Authority, during 2000, participated in another study, sponsored by the American Works Association, analyzing for these parasites. This study was conducted at the Lake Allatoona raw water intake, supplying the Wyckoff Treatment Division. No Cryptosporidium or Giardia were detected in this study. Our treatment technique is designed and optimized to remove these contaminants, and because the detection levels were so low, the treated water did not have to be tested under the SICR. Therefore, no additional precautions about our drinking water are currently required.

<sup>&</sup>lt;sup>2</sup>Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. During the reporting year, 100% of all samples taken to measure turbidity met water quality standards.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).